



US Department  
of Transportation  
Federal Aviation  
Administration

# MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

OMB No. 2120-0020  
Exp: 5/31/2018

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark N7152D	Serial No. 22-5016	
	Make Piper	Model PA-22-150	Series
2. Owner	Name (As shown on registration certificate) Harrison Scott D		Address (As shown on registration certificate)
			Address 192 E. Prescott Dr
			City Chandler State Arizona
			Zip 850249 Country USA

## 3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	Piper	(As described in Item 1 above)	22-5016
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

## 6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency		C. Certificate No. <b>A&amp;P3473353</b>
Name Bashir Khalil		<input checked="" type="checkbox"/> U. S. Certificated Mechanic	Manufacturer	
Address 711 W. German Rd		<input type="checkbox"/> Foreign Certificated Mechanic		
City Chandler State AZ		<input type="checkbox"/> Certificated Repair Station		
Zip 85286 Country USA		<input type="checkbox"/> Certificated Maintenance Organization		

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual Bashir Khalil 02/22/2022
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## 7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY	FAA Flt. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee <input checked="" type="checkbox"/>	Repair Station <input checked="" type="checkbox"/>	Inspection Authorization <input checked="" type="checkbox"/>	Other (Specify)

Certificate or Designation No. 3473353AI	Signature/Date of Authorized Individual Bashir Khalil 02/22/2022
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## NOTICE

*Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.*

### 8. Description of Work Accomplished

*(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)*

N7152D

02/22/2022

Nationality and Registration Mark

Date

Removed Vacuum ADI and DG.

This FAA form 337 records the installation of two AV-30 C (ADI/DG) location per uAvionix Corporation SA00410BO, date it August 31,2020.and AC43-13-1B&2B and aircraft SM.

Performed post installation and test per uAvionix Document UAV-1003947-001, rev E , all tests are Satisfactory.

Performed 91.411 per CFR 14 part 43 appendix E, all checked satisfactory.

Performed electrical load analysis and full electrical load does not exceed 80% of the alternator output. Aircraft Weight and Balance, and Equipment List were revised to reflect this alteration.

W&B and equipments list is modified.

Continue airworthiness On "condition Monitored"

AFMS was added to the POH

Log book entry is made.

END

☐ Additional Sheets Are Attached



U.S. Department of  
Transportation  
Federal Aviation  
Administration

**MAJOR REPAIR AND ALTERATION**  
**(Airframe, Powerplant, Propeller, or Appliance)**

Form Approved  
OMB No. 2120-0020  
11/30/2007

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Nationality and Registration Mark N7152D	Serial No. 22-5016	
	Make PIPER	Model PA22	Series -150
2. Owner	Name (As shown on registration certificate)  HARRISON SCOTT D	Address (As shown on registration certificate)	
		Address 192 EAST PRESCOTT DR	
		City CHANDLER	State AZ
		Zip 85249-4899	Country USA

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial Number
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME		(As described in Item 1 above)	
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency	
Name	BRIAN L WILSON	<input checked="" type="checkbox"/> U.S. Certificated Mechanic	Manufacturer
Address	1675 EAST RYAN ROAD	<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
City	CHANDLER State AZ	<input type="checkbox"/> Certificated Repair Station	A&P 497728418
Zip	85286 Country USA	<input type="checkbox"/> Certificated Maintenance Organization	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual BRIAN L WILSON 1/6/2018
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7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ APPROVED ☐ REJECTED

BY	FAA Fit Standards Inspector	Manufacturer	Maintenance Organization	Person Approved by Canadian Department of Transport
	FAA Designee	Repair Station	<input checked="" type="checkbox"/> Inspection Authorization	Other (Specify)

Certificate or Designation No. A&P 497728418 IA	Signature/Date of Authorized Individual BRIAN L WILSON 1/6/2018
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## NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

### 8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

N7152D

1/6/2018

Nationality and Registration Mark

Date

AFTT: 2472

STEVE'S AIRCRAFT GASCOLATOR ASSEMBLY, PN SA3-00, SN 26383, INSTALLED ORIGINAL LOCATION LOWER FIREWALL. INSTALLATION COMPLETED PER STC -SA01026SE, AMENDED 12-6-2002 AND INSTALLATION INSTRUCTION DOCUMENT 3200-3-2 DATED 11-7-2001, REVISED 7-29-2003.

WEIGHT CHANGE NEGLIGIBLE, WEIGHT & BALANCE RE-CALCULATION NOT REQUIRED.

#### INSTRUCTIONS CONTINUED AIRWORTHINESS:

CONTINUED AIRWORTHINESS INSTRUCTIONS SPECIFIED IN DOCUMENT 3200-3-1, DATED 11-7-2001, REVISED 5-25-2003.

#### DAILY:

DRAIN GASCOLATOR BEFORE FIRST FLIGHT EACH DAY.

#### 100/ANNUAL INSPECTIONS:

1. TURN OFF FUEL
2. REMOVE SAFETY DEVICE
3. REMOVE BOWL AND CLEAN
4. CHECK SCREEN AND CLEAN IF NECESSARY
5. CHECK CONDITION OF O-RING
6. RE-INSTALL BOWL – ALWAYS USE FUEL RESISTANT LUBE ON O-RING WHEN INSTALLING BOWL (PARKER O-LUBE OR EQUIVALENT)
7. RE-INSTALL SAFETY DEVICE
8. CHECK FOR GENERAL SECURITY
9. TURN ON FUEL AND CHECK FOR LEAKS

----- END OF DOCUMENT -----

☐ Additional Sheets Are Attached



US Department  
of Transportation  
Federal Aviation  
Administration

**MAJOR REPAIR AND ALTERATION**  
**(Airframe, Powerplant, Propeller, or Appliance)**

Form Approved  
OMB No. 2120-0020  
2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark <b>N7152D</b>	Serial No. <b>22-5016</b>	
	Make <b>PIPER</b>	Model <b>PA-22-150 TRIPACER</b>	Series <b>Fixed Wing Single-Engine</b>
2. Owner	Name (As shown on registration certificate) <b>HARRISON SCOTT D</b>	Address (As shown on registration certificate) Address <b>192 E. PRESCOTT DR</b> City <b>CHANDLER</b> State <b>ARIZONA</b> Zip <b>85249-4899</b> Country <b>UNITED STATES</b>	

**3. For FAA Use Only**

The alteration/data identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by a person authorized in 14 CFR, 43.7.

*Mark Whitcomb* 8 SEP 17  
FAA INSPECTOR DATE  
*Mark Whitcomb* WRO7

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type Manufacturer		

**6. Conformity Statement**

A. Agency's Name and Address		B. Kind of Agency	
Name <b>ANDREW ESTES</b>		<input checked="" type="checkbox"/> U. S. Certificated Mechanic	Manufacturer
Address <b>32424 W BUD ROAD</b>		Foreign Certificated Mechanic	C. Certificate No.
City <b>MARICOPA</b> State <b>AZ</b>		Certificated Repair Station	
Zip <b>85138</b> Country <b>USA</b>		Certificated Maintenance Organization	<b>2828023 A&amp;P</b>

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual <b>09.08.2017</b>
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**7. Approval for Return to Service**

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY	FAA Flt. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	<input checked="" type="checkbox"/> Inspection Authorization	Other (Specify)

Certificate or Designation No. <b>2828023 IA</b>	Signature/Date of Authorized Individual <b>09.08.2017</b>
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## NOTICE

*Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.*

### 8. Description of Work Accomplished

*(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)*

N7152D TACH: 601.21

09.08.2017

Nationality and Registration Mark

Date

Type certification Basis: CAR 3, T/C 1A6

1. Removed 600 x 6 Tires from main landing gear.
2. Installed 800 x 6, 6 ply Condor tires on main landing gear.
3. All work accomplished in accordance with AC 43.13-1B, methods, techniques and practices, Piper PA-22 Service Manual.
4. Approval Criteria for Tundra Tire Installation. AC 23.17C Tundra Tires.
5. New weight and balance computed and aircraft records updated.
6. Instructions for Continued Airworthiness will be in accordance with: AC43.13-1b, Acceptable methods techniques & practices, Piper PA-22 Service Manual.
7. Reference 337 dated 06/03/09, N72CJ for previous approved installation.

END

☐ Additional Sheets Are Attached

 U.S. Department of Transportation Federal Aviation Administration		<b>MAJOR REPAIR AND ALTERATION</b> (Airframe, Powerplant, Propeller, or Appliance)		Form Approved OMB No. 2120-0030 11/30/2007	Product Tracking Number:  For FAA Use Only
		INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))			
1. Aircraft	Nationality and Registration Mark N720J		Serial No. 22-83		
	Make Piper		Model PA-22-135		
2. Owner	Name (As shown on registration certificate) Olinger, Kenneth L. Olinger Ann E.		Address (As shown on registration certificate) Address P. O. Box 1180		
			City Willow State Alaska Zip 99688-1180 Country USA		
3. For FAA Use Only					
<div style="font-size: 2em; font-weight: bold; margin-bottom: 20px;">ATTACHMENT</div> <div style="font-size: 0.8em;">             This form is to be used to report major repairs and alterations to aircraft, airframes, powerplants, propellers, or appliances. The owner or operator of the aircraft must file this form with the FAA within 30 days of the completion of the work. The form must be filed with the FAA Form 337 (used) in § 43.7           </div> <div style="margin-top: 20px;">             06/03/2009 <i>[Signature]</i> A103           </div>					
4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER	_____	_____	_____
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type _____	_____	_____
6. Conformity Statement					
A. Agency's Name and Address			B. Kind of Agency		
Name Marvin E. Trimmer DBA Trimmer Aviation LLC Address P. O. Box 301 City Willow State Alaska Zip 99688-0301 Country USA			<input checked="" type="checkbox"/> U. S. Certified Mechanic <input type="checkbox"/> Foreign Certified Mechanic <input type="checkbox"/> Certified Repair Station <input type="checkbox"/> Certified Maintenance Organization		
			C. Certificate No.		
			AP30410851A		
I, _____, certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
Extended range for per 14 CFR Part 43 App. B		Signature/Date of Authorized Individual Marvin E. Trimmer <i>[Signature]</i> 6-6-09			
7. Approval for Return to Service					
Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is					
<input checked="" type="checkbox"/> Approved <input type="checkbox"/> Rejected					
By	FAA PL Standards Inspector	Manufacturer	Maintenance Organization		Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	X Inspection Authorization		Other (Specify):
Certificate or Designation No. AP 30410851A		Signature/Date of Authorized Individual Marvin E. Trimmer <i>[Signature]</i> 6-6-09			

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

5. Description of Work Accomplished

N72CJ Piper PA-22-135 S/N 22-83

#31

N72CJ

Nationality and Registration Mark

2009

Date

6-6-09

Type certification Basis: CAR 1, TIO 1A6

1. Removed 6:00 X 8 Tires from main landing gear & nose gear.
2. Installed 8:50 X 8 tires and 8:50 tubes on Cleveland wheels with single piston brakes on main landing gear & installed 7:00 X 8 nose gear.
3. All work accomplished in accordance with AC 43.13-18 Chapter 9 Section 17, 18, 19, 20, 21, using accepted methods, techniques and practices.
4. Order: 8300.10 Revised Approval Criteria for Tundra Tire Installation. AC 23.175 Tundra Tires.
5. New weight and balance computed and equipment list revised.
6. Instructions for Continued Airworthiness: will be in accordance with: AC43.13-1b, Acceptable methods, techniques & practices, Chapter 9 Section 1, para 2-7.e, 1, 2, 6, f, g, para 9-13, through para 9-21.

END-----Nothing Else Follows-----END

[ ] Additional Sheets Are Attached





US Department  
of Transportation  
Federal Aviation  
Administration

**MAJOR REPAIR AND ALTERATION**  
**(Airframe, Powerplant, Propeller, or Appliance)**

Form Approved  
OMB No. 2120-0020  
2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark N7152D	Serial No. 22-5016	
	Make PIPER	Model PA-22-150 TRIPACER	Series Fixed Wing Single-Engine
2. Owner	Name (As shown on registration certificate) HARRISON SCOTT D	Address (As shown on registration certificate) Address 192 E. PRESCOTT DR City CHANDLER State ARIZONA Zip 85249-4899 Country UNITED STATES	

**3. For FAA Use Only**

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in Item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

**6. Conformity Statement**

A. Agency's Name and Address		B. Kind of Agency	
Name	ANDREW ESTES	<input checked="" type="checkbox"/> U. S. Certificated Mechanic	Manufacturer
Address	32424 W BUD ROAD	<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
City	MARICOPA State AZ	<input type="checkbox"/> Certificated Repair Station	
Zip	85138 Country USA	<input type="checkbox"/> Certificated Maintenance Organization	2828023 A&P

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual 07.28.2017
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**7. Approval for Return to Service**

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY	FAA Fit. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	<input checked="" type="checkbox"/> Inspection Authorization	Other (Specify)

Certificate or Designation No. 2828023 IA	Signature/Date of Authorized Individual 07.28.2017
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## NOTICE

*Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.*

### 8. Description of Work Accomplished

*(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)*

N7152D TACH: 593.79

07.28.2017

Nationality and Registration Mark

Date

Installation of landing light

1. Reinstalled PA-22-150 landing light bracket assembly P/N14502.
2. Updated aircraft records.

END

☐ Additional Sheets Are Attached



US Department  
of Transportation  
Federal Aviation  
Administration

**MAJOR REPAIR AND ALTERATION**  
**(Airframe, Powerplant, Propeller, or Appliance)**

Form Approved  
OMB No. 2120-0020  
2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark	Serial No.		
	N7152D	22-5016		
	Make	Model	Series	
	PIPER	PA-22-150	Fixed wing single engine	
2. Owner	Name (As shown on registration certificate)		Address (As shown on registration certificate)	
	HARRISON SCOTT D		Address 192 E PRESCOTT DR	
			City CHANDLER	State AZ
		Zip 85249	Country UNITED STATES	

**3. For FAA Use Only**

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME		(As described in Item 1 above)	
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

**6. Conformity Statement**

A. Agency's Name and Address		B. Kind of Agency	
Name ANDREW ESTES		<input checked="" type="checkbox"/> U. S. Certificated Mechanic	Manufacturer
Address 32424 W BUD ROAD		<input type="checkbox"/> Foreign Certificated Mechanic	C. Certificate No.
City MARICOPA	State AZ	<input type="checkbox"/> Certificated Repair Station	
Zip 85138	Country USA	<input type="checkbox"/> Certificated Maintenance Organization	2828023 A&P

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual
	06-24-2016

**7. Approval for Return to Service**

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY	FAA Fit. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	<input checked="" type="checkbox"/> Inspection Authorization	

Certificate or Designation No.	Signature/Date of Authorized Individual
2828023 IA	06-24-2016

## NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

### 8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

N7152D TACH - 0525.46

06-24-2016

Nationality and Registration Mark

Date

Installation of vortex generators on the wings and horizontal stabilizer in accordance with Drawing Package MA2036, Revision IR, dated May 24, 1994, and Installation Manual MA2307, Revision IR, dated May 24, 1994, per STC#SA00097SE.

Instructions for Continued Airworthiness of Micro Vortex Generator Installations are stated on VG Operating Placard #MA8001 which must be installed in an easily seen location in the cockpit. This placard states: "if more than 5 VGs are damaged or missing, the aircraft is not airworthy." To make it airworthy, the missing VGs in excess of five need to be replaced. The VGs should be examined prior to each flight, during the pre-flight inspection, to determine if any are missing or damaged. Missing or damaged VGs in excess of five need to be replaced by the installation of a new (replacement) part. Installation is accomplished with Loctite Depend Adhesive #330. No other maintenance or inspections are necessary.

Negligible weight change

END

☐ Additional Sheets Are Attached

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION <b>MAJOR REPAIR AND ALTERATION</b> (Airframe, Powerplant, Propeller, or Appliance)				Form Approved Budget Bureau No. 04-R060.1 <b>FOR FAA USE ONLY</b> OFFICE IDENTIFICATION FTW-GADO 2-1-06	
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.					
1. AIRCRAFT	MAKE	Piper Tri-Pacer	MODEL	PA-22	
	SERIAL NO.	565016	NATIONALITY AND REGISTRATION MARK	N-7152D	
2. OWNER	NAME (As shown on registration certificate)		ADDRESS (As shown on registration certificate)		
	Richard G. Hoffmann II		504 McFarlane Dr Allen, Texas 75002		
3. FOR FAA USE ONLY					
4. UNIT IDENTIFICATION					5. TYPE
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****			X	
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				
6. CONFORMITY STATEMENT					
A. AGENCY'S NAME AND ADDRESS			B. KIND OF AGENCY		C. CERTIFICATE NO.
Wesley I. Lauer, Jr. 3033 Cortez Dr. Ft. Worth, Texas			<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC		ASP 722216
			<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC		
			<input type="checkbox"/> CERTIFICATED REPAIR STATION		
			<input type="checkbox"/> MANUFACTURER		
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
DATE			SIGNATURE OF AUTHORIZED INDIVIDUAL		
6-4-72			Wesley I. Lauer		
7. APPROVAL FOR RETURN TO SERVICE					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED					
BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION		OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		
DATE OF APPROVAL OR REJECTION		CERTIFICATE OR DESIGNATION NO.		SIGNATURE OF AUTHORIZED INDIVIDUAL	
6-4-72		722216		Wesley I. Lauer	

### NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

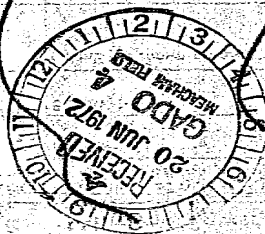
8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Installed welded patch repair at the following locations, in accordance with AC 43.13-1 Page 30 Par. 49.

1. 3 inches from firewall attach point on left hand upper nose landing gear mount. Bottom side of tubing.

2. 18 inches from firewall attach point on the left hand upper nose landing gear mount. Top side of mount tubing.

3. 14 inches from firewall attach point on left hand upper nose landing gear mount. Top side of mount tubing.



☐ ADDITIONAL SHEETS ARE ATTACHED

U. S. DEPARTMENT OF COMMERCE CIVIL AERONAUTICS ADMINISTRATION		Form Approved - Budget Bureau No. 41-R041.5
<b>APPLICATION FOR AIRWORTHINESS CERTIFICATE AND/OR ANNUAL INSPECTION OF AN AIRCRAFT</b>		<b>INSTRUCTIONS</b> Please print or type. Submit this form to the Civil Aeronautics Administration Aviation Safety Field Representative.
1. TYPE OF APPLICATION (Check which)		
<input checked="" type="checkbox"/> ORIGINAL ISSUANCE OF CERTIFICATE <input type="checkbox"/> ANNUAL INSPECTION FOR RENEWAL OF CERTIFICATE <input type="checkbox"/> AMENDMENT OR MODIFICATION OF CURRENT CERTIFICATE <input type="checkbox"/> RECERTIFICATION UNDER THE PROVISIONS OF CAR 8 <input type="checkbox"/> MULTIPLE CERTIFICATE UNDER THE PROVISIONS OF CAR 8 <input type="checkbox"/>		
2. AIRWORTHINESS CLASSIFICATION (Check appropriate item(s)) It is requested that the Certificate of Airworthiness be issued to permit operation of the aircraft in the following air- worthiness classification(s):		
<input checked="" type="checkbox"/> STANDARD (NORMAL, UTILITY, ACROBATIC, TRANSPORT CATEGORIES) <input type="checkbox"/> LIMITED (SEE CAR 9) <input type="checkbox"/> RESTRICTED (SEE CAR 9) (Check the restricted special purpose operation(s) to be conducted) <input type="checkbox"/> AGRICULTURAL AND PEST CONTROL <input type="checkbox"/> AERIAL ADVERTISING <input type="checkbox"/> AERIAL SURVEYING <input type="checkbox"/> GLIDER TOWING <input type="checkbox"/> PATROLLING <input type="checkbox"/> FOREST AND WILDLIFE CONSERVATION <input type="checkbox"/> WEATHER CONTROL <input type="checkbox"/> OTHER <input type="checkbox"/> EXPERIMENTAL (Check the type of experimental operation(s) to be conducted) <input type="checkbox"/> RESEARCH AND DEVELOPMENT <input type="checkbox"/> AMATEUR-BUILT <input type="checkbox"/> DEMONSTRATION <input type="checkbox"/> RACING <input type="checkbox"/> EXHIBITION <input type="checkbox"/> OTHER		
3. AIRCRAFT IDENTIFICATION (Complete all items)		
a. AIRCRAFT MAKE <b>Piper</b>	b. AIRCRAFT MODEL <b>PA-22 "150"</b>	c. AIRCRAFT SERIAL NO. <b>22-5016</b>
d. ENGINE MAKE <b>Lycoming</b>	e. ENGINE MODEL <b>O-320</b>	
4. AIRCRAFT REGISTRATION INFORMATION (Complete all items)		
a. <del>REGISTERED</del> OWNER'S FULL NAME <b>PIPER AIRCRAFT CORPORATION</b>	b. PERMANENT MAILING ADDRESS <b>LOCK HAVEN, PENNA.</b>	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK <b>N- 7152D</b>
I certify that the above statements are true. <i>W. S. Smith</i> Supv.-Order & Del. Dept March 14, 1957		
5. AIRCRAFT OWNER'S CERTIFICATION (Check and complete appropriate item)		
I hereby certify that I am the registered owner (or his agent) of the aircraft identified in Item 3 above which is registered* with the Civil Aeronautics Administration as required by the Regulations of the Administrator, Part 501 or 507 and when operated displays the following evidence of registration:		
<input type="checkbox"/> CERTIFICATE OF REGISTRATION, FORM ACA-500 (PART A), DATE OF ISSUE _____ <input type="checkbox"/> APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B), FORM ACA-500, PART A, FORWARDED TO CAA AIRCRAFT RECORDS BRANCH, W-300 ON _____ <input type="checkbox"/> DEALER'S REGISTRATION CERTIFICATE, FORM ACA-1707, DATED _____		
*In order to be eligible for registration an aircraft must be owned by a citizen of the United States, as defined by Section 1 (13) of the Civil Aeronautics Act of 1938, as amended.		
ATTACHMENTS (Check which)		
<input type="checkbox"/> ACA-319 <input type="checkbox"/> WEIGHT AND BALANCE REPORT <input type="checkbox"/> ACA-337 <input type="checkbox"/> DATA, DRAWINGS, ETC. <input type="checkbox"/> ACA-317 <input type="checkbox"/> UNAPPROVED DEVIATION DATA		
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)		(TITLE)
(DATE)		(TITLE)

U. S. DEPARTMENT OF COMMERCE  
CIVIL AERONAUTICS ADMINISTRATION

## AIRCRAFT INSPECTION REPORT

(To be completed by a CAA representative or approved repair station)

The aircraft described in Item 3 on the reverse of this form has been inspected and found to conform to the following:  
(Check and complete applicable items)

1. AIRCRAFT AND ENGINE CERTIFICATION BASIS
- a. ☒ AIRCRAFT SPECIFICATION NO. 1A6 THROUGH SHEET REVISION NO. 18
- b. ☐ AIRCRAFT LISTING PAGE NO. \_\_\_\_\_
- c. ☒ AIRWORTHINESS DIRECTIVE SUMMARY 1957 THROUGH CARD NO. 57-4  
(YEAR)
- d. ☐ CIVIL AIR REGULATION PART 8 (MODIFIED TYPE CERTIFICATE)

## 2. AIRCRAFT AND ENGINE OPERATING RECORDS

- a. ☒ AIRCRAFT NEW—NO PREVIOUS OPERATION OR MAINTENANCE HISTORY
- b. ☒ COMPLIANCE WITH APPLICABLE AIRWORTHINESS DIRECTIVES RECORDED
- c. ☐ AIRCRAFT RECORDS INDICATE THE AIRFRAME HAS BEEN OPERATED A TOTAL OF \_\_\_\_\_ HOURS
- d. ☐ ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
- | SERIAL NO.       | TOTAL HOURS       |
|------------------|-------------------|
| SERIAL NO. _____ | TOTAL HOURS _____ |
| SERIAL NO. _____ | TOTAL HOURS _____ |
| SERIAL NO. _____ | TOTAL HOURS _____ |

## 3. PREVIOUS INSPECTION RECORD (INSPECTION RECORDED ON FORM ACA-319)

- a. LAST AIRWORTHINESS INSPECTION CONDUCTED \_\_\_\_\_ (DATE)
- ☐ BY AIRCRAFT MANUFACTURER
- ☐ BY APPROVED REPAIR STATION, CERTIFICATE NO. \_\_\_\_\_
- ☐ BY MECHANIC, CERTIFICATE NO. \_\_\_\_\_
- b. ☐ PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

## 4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED

- a. ☐ OPERATION LIMITATIONS, FORM ACA-309, WAS ISSUED (COPY ATTACHED)
- b. ☐ CURRENT OPERATION LIMITATIONS, FORM ACA-309, IS AVAILABLE IN AIRCRAFT
- c. ☒ CURRENT APPROVED AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT
- d. ☒ CURRENT WEIGHT AND BALANCE INFORMATION IS AVAILABLE IN AIRCRAFT
- e. ☒ THIS INSPECTION HAS BEEN RECORDED IN THE AIRCRAFT RECORDS
- f. ☐ CERTIFICATE OF AIRWORTHINESS, FORM ACA-1362, ISSUED TO EXPIRE \_\_\_\_\_ (DATE)
- g. ☐ PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE \_\_\_\_\_ (DATE)
- BY \_\_\_\_\_ (NAME OF ISSUING REPRESENTATIVE) \_\_\_\_\_ (DESIGNATION NO.)

## 5. CAA APPROVED REPAIR STATION CERTIFICATION

The aircraft described on the reverse has been inspected under the authority accorded certificated repair station No. \_\_\_\_\_ by CAR 52 and was found to be:

- ☐ AIRWORTHY
- ☐ UNAIRWORTHY

(REPAIR STATION AUTHORIZED SIGNATURE)

(DATE)

## 6. CAA REPRESENTATIVE CERTIFICATION

I HAVE INSPECTED THE AIRCRAFT DESCRIBED ON THE REVERSE AND FOUND IT ☒ AIRWORTHY ☐ UNAIRWORTHY  
(Check appropriate item)

DESIGNER'S SIGNATURE <i>[Signature]</i>	DESIGNATION NO.	DATE	<input checked="" type="checkbox"/> ACCEPTED <input type="checkbox"/> REINSPECTED <input type="checkbox"/> SPOT CHECKED
AVIATION MECHANIC'S SIGNATURE J. J. McHenry, Asst. Chief Engineer Piper Aircraft Corporation	CAA DESIGNATION NO. DMCR 1-1	DATE 3-14-57	

☒ ATTACHMENT - Form ACA 132



## UNITED STATES OF AMERICA — FEDERAL AVIATION AGENCY

## STANDARD AIRWORTHINESS CERTIFICATE

1. NATIONALITY AND REGISTRATION MARKS <b>N7152D</b>	2. MANUFACTURER AND MODEL <b>PIPER PA-2-150</b>	3. AIRCRAFT SERIAL NUMBER <b>162-5316</b>	4. CATEGORY <b>NORMAL UTILITY</b>
5. AUTHORITY AND BASIS FOR ISSUANCE This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex B to the Convention on International Civil Aviation, except as noted herein. <b>NONE</b>			
6. TERMS AND CONDITIONS Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, inspection, and alterations are performed in accordance with Parts 23, 25, and 31 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.			
DATE OF ISSUANCE <b>SEP 1987</b>	FAA REPRESENTATIVE <b>GERALD E. ARNS</b>	DESIGNATION NUMBER <b>WE-GADO-3</b>	

Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding \$1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

FAA Form 1362 (7-65)

0052-040-8000 (8100)

CAMERA NO. 2 NDATE: 8 - 22 - 86

CAMERA NO. 2 NDATE: 8 - 22 - 86

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION				Form Approved Budget Bureau No. 04-R060.1	
<b>MAJOR REPAIR AND ALTERATION</b> (Airframe, Powerplant, Propeller, or Appliance)				FOR FAA USE ONLY	
				OFFICE IDENTIFICATION	
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.					
<b>1. AIRCRAFT</b>	MAKE <u>PIPER</u>		MODEL <u>PA 22</u>		
	SERIAL NO. <u>98-5016</u>		NATIONALITY AND REGISTRATION MARK <u>USA N7152D</u>		
<b>2. OWNER</b>	NAME (As shown on registration certificate) <u>TRI-STATE TRIM LINE</u>		ADDRESS (As shown on registration certificate) <u>3316 RIDGE LAKE LANE</u> <u>PO BOX 524</u> <u>PLANO, TX 75074</u>		
<b>3. FOR FAA USE ONLY</b>					
<b>4. UNIT IDENTIFICATION</b>					
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****				<input checked="" type="checkbox"/>
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				
<b>6. CONFORMITY STATEMENT</b>					
A. AGENCY'S NAME AND ADDRESS		B. KIND OF AGENCY		C. CERTIFICATE NO.	
<u>TEXOMA AVIATION, INC.</u> <u>MCKINNEY AIRPORT</u> <u>MCKINNEY TEXAS 75069</u>		<input type="checkbox"/> U.S. CERTIFICATED MECHANIC		<u>202-104</u>	
		<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC			
		<input checked="" type="checkbox"/> CERTIFICATED REPAIR STATION			
		<input type="checkbox"/> MANUFACTURER			
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
DATE <u>21 April 83</u>		SIGNATURE OF AUTHORIZED INDIVIDUAL <u>James P. Bush</u>			
<b>7. APPROVAL FOR RETURN TO SERVICE</b>					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED					
BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	INSPECTION AUTHORIZATION		
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		
DATE OF APPROVAL OR REJECTION <u>21 April 83</u>		CERTIFICATE OR DESIGNATION NO. <u>202-104</u>		SIGNATURE OF AUTHORIZED INDIVIDUAL <u>James P. Bush</u>	

# NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

INSTALLED KING-KX-160 NAV.COM, KI-211-5 Power Pack,  
Power Supply mounted under Rear Seat. USED MF6. E.A.C.  
43.13.1 & AC 43.13-2A CHAP 2 & 3 AS GUIDELINES FOR INSTALLATION  
Removed from A/C was MARK 6 BY PERSON OR PERSONS UNKNOWN.

END

RECEIVED

MAY 4 1983

FAA - DALLAS  
GADD

☐ ADDITIONAL SHEETS ARE ATTACHED

FEDERAL AVIATION AGENCY  
**MAJOR REPAIR AND ALTERATION**  
 (Airframe, Powerplant, Propeller, or Appliance)

Form Approved  
 Budget Bureau No. 04-R060.1

FOR FAA USE ONLY  
 OFFICE IDENTIFICATION **DE-600**  
**4-5-03**

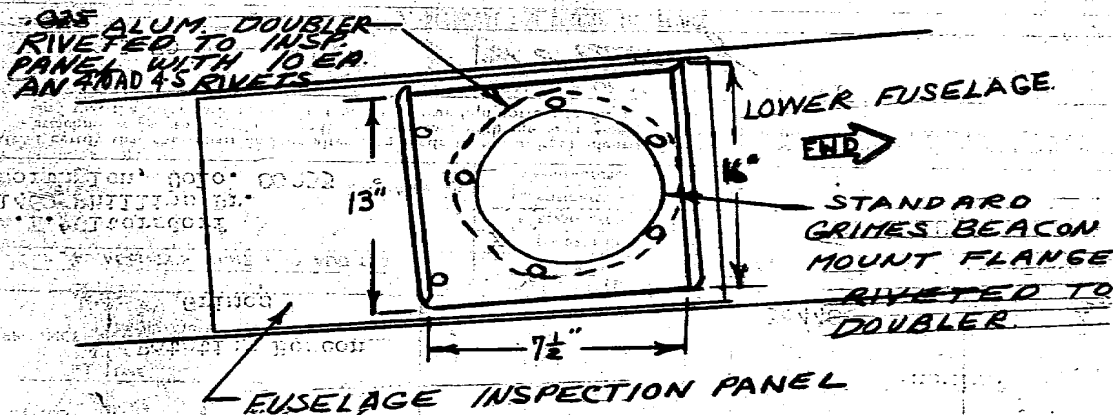
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE <b>PIPER</b>	MODEL <b>PA-22 150</b>
	SERIAL NO. <b>22 5016</b>	NATIONALITY AND REGISTRATION MARK <b>N7152D</b>
2. OWNER	NAME (As shown on registration certificate) <b>Oltersdorf, Alvin E.</b>	ADDRESS (As shown on registration certificate) <b>1460 Phillips Dr. Northglenn, Colo. 80233</b>
	3. FOR FAA USE ONLY	
4. UNIT IDENTIFICATION		
UNIT	MAKE	MODEL
AIRFRAME	(As described in item 1 above)	
POWERPLANT		
PROPELLER		
APPLIANCE	TYPE <b>Rotating Beacon</b> MANUFACTURER <b>Grines</b>	<b>30448</b>
5. TYPE		
REPAIR		
ALTERATION		
6. CONFORMITY STATEMENT		
A. AGENCY'S NAME AND ADDRESS <b>A.E. Oltersdorf 1460 Phillips Dr. Northglenn, Colo. 80233</b>		B. KIND OF AGENCY <input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC <input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC <input type="checkbox"/> CERTIFICATED REPAIR STATION <input type="checkbox"/> MANUFACTURER
		C. CERTIFICATE NO. <b>1218514</b>
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.		
DATE <b>2-1-80</b>	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>A.E. Oltersdorf</i>	
7. APPROVAL FOR RETURN TO SERVICE		
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Agency and is <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED		
BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER
	FAA DESIGNEE	REPAIR STATION
		INSPECTION AUTHORIZATION
		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT
DATE OF APPROVAL OR REJECTION <b>3-5-70</b>		CERTIFICATE OR DESIGNATION NO. <b>AP-357665T.A</b>
		SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Richard A. Ventel</i>

## NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)



Installed Grimes Rotating Beacon on lower fuselage inspection panel 12 1/4 INCHES aft of the datum.

Installed 10 amp circuit breaker at C/B panel, AWG-18 wire used, routed & tied to prevent chaffing. Total added wt., 2lbs.

ITEM	WT.	ARM	MOMENT
Airplane	1147	70.1	80404
Beacon	2	175.	350
	<u>1149</u>		<u>80754</u>

80754  
1149 = 70.2" empty C.G.

G.W.	2000
empty wt.	<u>1149</u>
	851 usefull load.

☐ ADDITIONAL SHEETS ARE ATTACHED

1350-1377 32 MAR 5 '68 FEB 15 1968

FEDERAL AVIATION AGENCY <b>MAJOR REPAIR AND ALTERATION</b> (Airframe, Powerplant, Propeller, or Appliance)				Form Approved Budget Bureau No. 04-R060.1 FOR FAA USE ONLY OFFICE IDENTIFICATION DEN-GADO 45-83	
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.					
1. AIRCRAFT	MAKE <b>Piper</b>		MODEL <b>PA-22-150</b>		
	SERIAL NO. <b>22-5016</b>		NATIONALITY AND REGISTRATION MARK <b>U.S.A. N-7152D</b>		
2. OWNER	NAME (As shown on registration certificate) <b>Harder Paul P</b>		ADDRESS (As shown on registration certificate) <b>4400 Sioux Dr. Boulder, Colorado 80302</b>		
	3. FOR FAA USE ONLY				
4. UNIT IDENTIFICATION					
UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
AIRFRAME	***** (As described in item 1 above) *****			REPAIR	ALTERATION
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				
6. CONFORMITY STATEMENT					
A. AGENCY'S NAME AND ADDRESS		B. KIND OF AGENCY		C. CERTIFICATE NO.	
<b>Philip W. Morris</b> <b>8783 Princeton St.</b> <b>Westminster, Colorado 80030</b>		<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC		<b>A-1761993</b>	
		<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC			
		<input type="checkbox"/> CERTIFICATED REPAIR STATION			
		<input type="checkbox"/> MANUFACTURER			
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
DATE: <b>February 15, 1968</b>		SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Philip W. Morris</i>			
7. APPROVAL FOR RETURN TO SERVICE					
Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Agency and is: <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED					
BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify)	
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	Verified by Operator #36	
DATE OF APPROVAL OR REJECTION <b>February 15, 1968</b>		CERTIFICATE OR DESIGNATION NO. <b>12-1454786</b>	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Robert H. Peters</i>		

## NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

U.S.A. N-7152D PIPER PA-22-150 Serial #22-5016

Recovered complete aircraft with Geonite 101. Work was performed in accordance with Cooper Engineering Company manual #101 under STC #SA4-903 and AC 43.13-1 Chapter #3. No weight change.

**END**

FEB 27 3 47 PM '58

ADDITIONAL SHEETS ARE ATTACHED



JUN 24 1963

Verified by Operator #33		FEDERAL AVIATION AGENCY		Form approved. Budget Bureau No. 04-R060.	
MAJOR REPAIR AND ALTERATION FORM (AIRFRAME, POWERPLANT, PROPELLER OR APPLIANCE)					
1. AIRCRAFT	MAKE <b>Piper</b>	MODEL <b>PA-22-150</b>	SERIAL NO. <b>22-5016</b>	NATIONALITY AND REGISTRATION MARK <b>N 7152D</b>	
2. OWNER	NAME (First, middle, last) <b>A.M. Blankenship &amp; Guy Spivey</b>		ADDRESS (Street and number, city, zone and State) <b>915 Edgewood St. SW Decatur, Ala</b>		
3. COMPLETE ONLY FOR UNIT REPAIRED AND/OR ALTERED. DESCRIBE WORK ACCOMPLISHED ON REVERSE IN ACCORDANCE WITH CIVIL AERONAUTICS MANUAL-18.					
UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check)	
a. AIRFRAME	(As described in item 1 above)			MAJOR REPAIR	MAJOR ALTERATION
b. POWERPLANT	The data identified herein complied with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by a person authorized in CAR 18.11 (b).				
c. PROPELLER	TYPE AND MANUFACTURER <b>6-19-63</b>			<b>SO-64D0-2</b>	
d. APPLIANCE	Data				
4. AIRCRAFT WEIGHT AND BALANCE DATA. This item must be completed by repair or alteration agency. However, in the case of a spare component, it will not be completed until such component is installed in an aircraft. At this time, it will be completed by the installing agency, if applicable.					
CATEGORY	EMPTY WEIGHT (Pounds)	EMPTY CENTER OF GRAVITY (Inches from datum)		USEFUL LOAD (Pounds)	
<b>Normal</b>	<b>1147</b>	<b>70.1</b>		<b>853</b>	
5. CONFORMITY STATEMENT (Complete and check)					
a. AGENCY'S NAME AND ADDRESS		b. KIND OF AGENCY		c. CERTIFICATE NO.	
<b>Judson L. Abernathy 1411 Beach St. SE Decatur, Ala.</b>		<input checked="" type="checkbox"/> U. S. Certificated Mechanic. <input type="checkbox"/> Foreign Certificated Mechanic. <input type="checkbox"/> Certificated Repair Station. <input type="checkbox"/> Manufacturer. <input type="checkbox"/> (Check if repair or alteration was made under delegation option procedures.)		<b>ASP 1067612</b>	
d. I certify that the repair and/or alteration made to the unit(s) identified under item 3 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 18 of the U. S. Civil Air Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
<b>6-12-63</b> (Date repair and/or alteration completed)		<b>Judson L. Abernathy</b> (Signature of authorized individual)			
6. APPROVAL FOR RETURN TO SERVICE (Check and complete appropriate items)					
Pursuant to the authority specified below the unit identified in item 3 was inspected in the manner prescribed by the Administrator of the Federal Aviation Agency and is					
3 <input checked="" type="checkbox"/> APPROVED		BY <input type="checkbox"/> FAA Designee <input type="checkbox"/> Manufacturer <input type="checkbox"/> Canadian Department of Transport Inspector of Aircraft			
<input type="checkbox"/> REJECTED		<input type="checkbox"/> FAA Flight Standards Inspector <input type="checkbox"/> Repair Station <input checked="" type="checkbox"/> Other (Specify) <b>Inspection Authorization</b>			
<b>6-21-63</b> (Date of approval or rejection)		<b>Judson L. Abernathy ASP1067612</b> (Signature of authorized individual, title or identification number)			
7. TO BE COMPLETED ONLY BY FAA PERSONNEL					
a. <input type="checkbox"/> Forwarded for engineering comment <input type="checkbox"/> See attached memorandum					
b. <input checked="" type="checkbox"/> Accepted <b>7/10/63</b> <input type="checkbox"/> Reinspected (Date) <input type="checkbox"/> Spot Checked (Date)					
<b>7-02</b> <b>SO-64D0-2</b> (FAA designation number)		<b>Ch. Bayntun</b> (Signature Flight Standards Inspector)			

28 AUG 1 1963

JUL 17 1963

# MICRO INSTRUCTIONS

This form must be completed in duplicate each time a major repair and/or alteration is made of an aircraft, airframe, power-plant, propeller or appliance. After the repair and/or alteration has been inspected and item 6 completed, the original copy of this form will be made available to the aircraft owner for retention as part of the aircraft records. The duplicate copy is retained by the FAA for administrative purposes.

See CAM 18 for detailed instructions concerning the information to be furnished with this form and instructions concerning its preparation.

## 5. DESCRIPTION OF WORK ACCOMPLISHED

Removed Piper Marco Vht-2-LF Radio Package, Installed King KK-150 and Marco Mk-6 equipment in the inst panel where the former equipment was removed. The existing panel mounting was used, a new clamp and bracket was made up to support the rear of the boxes due to the increased weight of the equipment added. The existing antennas were used with a coupler between the omni receivers and the existing trans-witting attached to the KK-150 communications transceiver. All primary wiring was with AWG-16 wire to both sets. The KK-150 is protected with a 10 amp circuit breaker, and the Mk-6 with a 5 amp circuit breaker. Equipment was functionally checked after installation and compass deviation noted and a correction card made to note deviations. All audio wiring was made with AWG-20 wire and connected to the existing speaker, phones, and microphone circuits. All wiring cabled and routed to prevent fouling of controls and to prevent chaffing. Installation in accordance with King KK-150 and Marco Mk-6 installation manuals, and meets requirements of CAM 3.171 3.386, 3.652, 3.721.

### Electrical Loading

Item	Current
Mk-6 receiver	3.5 amps
King KK-150	6.5 amps
Electrical Amdt.	
and running lites.	5.0 amps
	15.0 amps

Electrical Load = 25 amps = 60% of the generator output of 25 amps.  
15 amps

### Weight and Ballance

Item	Weight	Arm	Moment
Aircraft	1142	70.0	79940
Removed Piper Radio	-10	60.0	-600
Installed Kx KERN 150	8.5	60.0	510
Installed Mk-6	6.3	60.0	378
	<u>1147.0</u>		<u>80440</u>

New CGC = 80440 = 70.1 inches aft of datum  
1147

### New useful load computations

Gross Weight	2000
Empty Weight	<u>1147</u>
Useful Load	<u>853</u>

This Aircraft shall be loaded in accordance with approved piper flight manual and loading charts. for PA-22

\*If additional space is needed attach additional sheets bearing aircraft name, type, and date work completed.

Check block if additional sheets are attached. ☐

U.S. GOVERNMENT PRINTING OFFICE: 1961-O-307340

Form FAA-887 (4-62)

JUL 15 12 32 PM '86

FEDERAL AVIATION  
REGISTRATION BRANCH

FEDERAL AVIATION AGENCY				Form approved. Budget Bureau No. 04-R060.	
<b>MAJOR REPAIR AND ALTERATION FORM (AIRFRAME, POWERPLANT, PROPELLER OR APPLIANCE)</b>					
1. AIRCRAFT	MAKE <b>Piper</b>	MODEL <b>PA-22 "150"</b>	SERIAL NO. <b>22-5016</b>	NATIONALITY AND REGISTRATION MARK <b>N7152D</b>	
2. OWNER	NAME (First, middle, last) <b>A. M. Blankenship &amp; Guy Spivey</b>		ADDRESS (Street and number, city, town and State) <b>915 Edgewood St. S. W. Decatur, Alabama</b>		
3. COMPLETE ONLY FOR UNIT REPAIRED AND/OR ALTERED. DESCRIBE WORK ACCOMPLISHED ON REVERSE IN ACCORDANCE WITH CIVIL AERONAUTICS MANUAL 18.					
UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check)	
a. AIRFRAME	***** (As described in item 1 above) *****			MAJOR REPAIR	MAJOR ALTERATION
b. POWERPLANT					
c. PROPELLER					
2. APPLIANCE	TYPE AND MANUFACTURER				
4. AIRCRAFT WEIGHT AND BALANCE DATA					
*AFTER the repairs and/or alterations described below were made.			This item must be completed by repair or alteration agency. However, in the case of a spare component, it will not be completed until such component is installed in an aircraft. At this time, it will be completed by the installing agency, if applicable.		
CATEGORY	EMPTY WEIGHT (Pounds)*	EMPTY CENTER OF GRAVITY (Inches from datum)*		USEFUL LOAD (Pounds)*	
<b>Normal</b>	<b>1142 Lbs.</b>	<b>70.0 Aft. Datum</b>		<b>858 Lbs</b>	
5. CONFORMITY STATEMENT (Complete and check)					
a. AGENCY'S NAME AND ADDRESS		b. KIND OF AGENCY		c. CERTIFICATE NO.	
<b>E. M. Rowe 507 10th Ave. Se. Decatur, Alabama</b>		<input checked="" type="checkbox"/> U. S. Certificated Mechanic. <input type="checkbox"/> Foreign Certificated Mechanic. <input type="checkbox"/> Certificated Repair Station. <input type="checkbox"/> Manufacturer. <input type="checkbox"/> (Check if repair or alteration was made under delegation option procedures.)		<b>A&amp;P 1424099</b>	
I certify that the repair and/or alteration made to the unit(s) identified under item 3 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 18 of the U. S. Civil Air Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
<b>September 14 1962</b> (Date repair and/or alteration completed)		<b>E. M. Rowe</b> (Signature of authorized individual)			
6. APPROVAL FOR RETURN TO SERVICE (Check and complete appropriate items)					
Pursuant to the authority specified below the unit identified in item 3 was inspected in the manner prescribed by the Administrator of the Federal Aviation Agency and is					
<input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED		BY <input type="checkbox"/> FAA Designee <input type="checkbox"/> Manufacturer <input type="checkbox"/> Canadian Department of Transport Inspector of Aircraft <input type="checkbox"/> FAA Flight Standards Inspector <input type="checkbox"/> Repair Station <input checked="" type="checkbox"/> Other (Specify) Inspection Authorization			
<b>September 14 1962</b> (Date of approval or rejection)		<b>A&amp;P 1052741</b> (Signature of authorized individual; title or identification number)			
7. TO BE COMPLETED ONLY BY FAA PERSONNEL					
a. <input type="checkbox"/> Forwarded for engineering comment <input type="checkbox"/> See attached memorandum					
b. <input checked="" type="checkbox"/> Accepted <b>9/19/62</b> (Date) <input type="checkbox"/> Reinspected (Date) <input type="checkbox"/> Spot Checked (Date)					
<b>50-6400-2</b> (FAA designation number)		<b>[Signature]</b> (Signature Flight Standards Inspector)			

### INSTRUCTIONS

This form must be completed in duplicate each time a major repair and/or alteration is made of an aircraft, airframe, powerplant, propeller or appliance. After the repair and/or alteration has been inspected and item 6 completed, the original copy of this form will be made available to the aircraft owner for retention as part of the aircraft records. The duplicate copy is retained by the FAA for administrative purposes.

See CAM 18 for detailed instructions concerning the information to be furnished with this form and instructions concerning its preparation.

#### 5. DESCRIPTION OF WORK ACCOMPLISHED

Removal of Rear Door As per. Piper Report 575 Page 5 Supplement To The Flight Manual. Approval Basis CAR 3 & 410 September 15, 1961. Piper PA-22 with Rear Door Removed Normal-Category Only. Document Attached to Basic Flight Manual And Limitations and Placards installed in Airplane. End

\*If additional space is needed attach additional sheets bearing aircraft nationality and registration mark and date work completed.

Check block if additional sheets are attached. ☐

U.S. GOVERNMENT PRINTING OFFICE: 760-0-327(9)

Form FAA-387 (4-52)